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19. ABSTRACT (Continue on reverse if necessary and identify by block number)

The XVIIIth Informal Conference on Photochemistry took place in Santa Monica, California, January 9-13, 1989, at the BayView Plaza Hotel. Traditionally informal conferences reflect the interests of the hosting institution, and the XVIIIth conference has emphasized photodissociation dynamics. There were 28 invited speakers from the U.S. and Europe, a total of approx. 40 oral presentations and approx. 80 poster presentations. There were about 200 participants, and we are particularly proud of the large number of student and postdoc participants - approx. 60 in total, 24 of which got travel support in addition to waiving the registration fee for all student participants.

In order to promote informal discussions between the participants we did the following: (i) We chose a conference site at a medium size hotel where all the participants could be accommodated, and had common meeting places; (ii) Lunches were included in the registration fee, and were served in a special dining hall at the hotel; (iii) The conference auditorium

(over)

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17

Continuation of block no. 19.

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The generous support from AFOSR covered mainly the travel expenses of five European speakers and several domestic speakers. In addition, it helped defray the costs of supplies, phone and postage.

Final Conference Report

XVIIITH INFORMAL CONFERENCE ON PHOTOCHEMISTRY

(Grant No. AFOSR-88-0289)

Submitted to:

Air Force Office of Scientific Research
Building 410
Bolling Air Force Base, DC 20332-6448

Attention: Dr. Francis Wodarczyk

Submitted by:

Curt Wittig and Hanna Reisler
Department of Chemistry
University of Southern California
Los Angeles, CA 90089-0482

The XVIIIth Informal Conference on Photochemistry took place in Santa Monica, California, January 9-13, 1989, at the BayView Plaza Hotel. Traditionally informal conferences reflect the interests of the hosting institution, and the XVIIIth conference has emphasized photodissociation dynamics. There were 28 invited speakers from the U.S. and Europe, a total of ~40 oral presentations and ~80 poster presentations. There were about 200 participants, and we are particularly proud of the large number of student and postdoc participants - ~60 in total, 24 of which got travel support in addition to waiving the registration fee for all student participants.

In order to promote informal discussions between the participants we did the following: (i) We chose a conference site at a medium size hotel where all the participants could be accommodated, and had common meeting places; (ii) Lunches were included in the registration fee, and were served in a special dining hall at the hotel; (iii) The conference auditorium and adjacent meeting areas were isolated and dedicated to our conference; (iv) Two evening poster sessions were organized, which became a focal point for the participants in the evening.

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XVIIIth INFORMAL CONFERENCE ON PHOTOCHEMISTRY

Holiday Inn Bayview Plaza Hotel
Santa Monica, CA 90405
January 9-13, 1989

Supported by:

National Science Foundation
Air Force Office of Scientific Research
National Aeronautics and Space Agency
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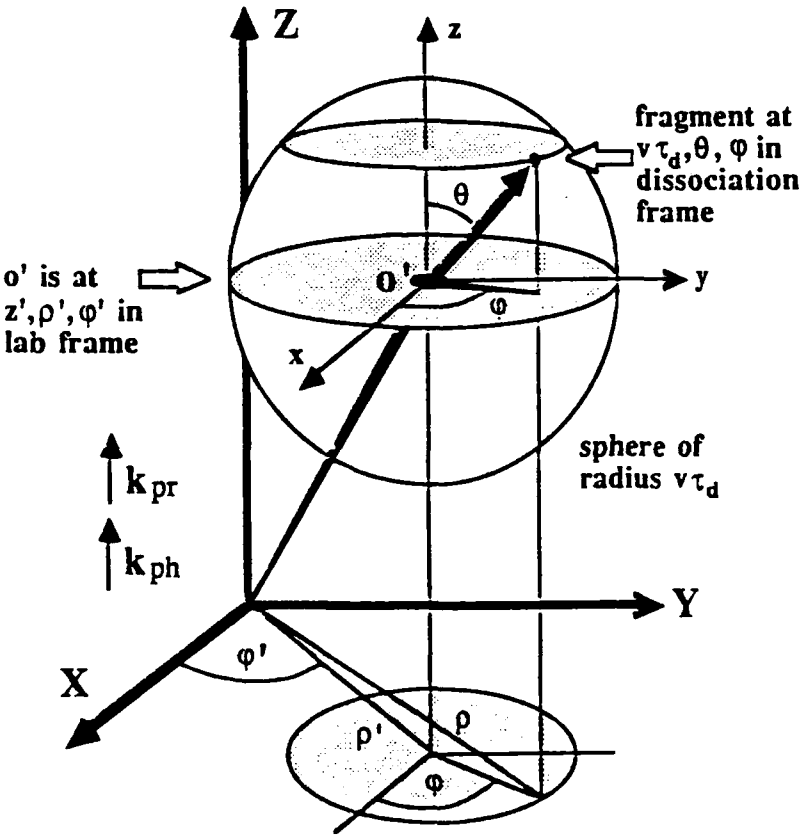

XVIIIth INFORMAL CONFERENCE ON PHOTOCHEMISTRY

Holiday Inn Bayview Plaza Hotel
Santa Monica, CA 90405

January 9-13, 1989

Organizers: R.A. Beaudet, H. Reisler and C. Wittig

Department of Chemistry
University of Southern California
Los Angeles, CA 90089

January 9 (Monday)

Session Chair:	Curt Wittig	
8:30 - 9:00	Richard Smalley (Rice)	Bucky in Space
9:00 - 9:30	Robert Whetten (UCLA)	Size-Scaling of Excitation Dynamics in Atomic and Molecular Clusters
9:30 - 9:50	Michael Topp (Pennsylvania)	Picosecond Time-Resolved Fluorescence Studies of the Photodissociation of Clusters Nucleated by Large Aromatic Molecules
9:50 - 10:20	BREAK	
10:20 - 10:50	Giacinto Scoles (Princeton)	Photodissociation Spectroscopy of Small and Large van der Waals Clusters
10:50 - 11:10	John Wessel (Aerospace)	Resonance Interactions in Naphthalene Clusters
11:10 - 11:30	Charles Parmenter (Indiana)	State-Selective Dissociation of the van der Waals Complex Between p-difluorobenzene and Ar
11:30 - 11:50	Ron Naaman (Weizmann)	Vibrationally-Induced Photodetachment from Water Clusters
12:00 - 1:30	LUNCH	

Session Chair:	Alec Wodtke	
1:30 - 2:00	Benoit Soep (Paris)	Half-Collision Reactions of Excited Calcium Produced by Laser Vaporisation
2:00 - 2:30	Curt Wittig (USC)	H-Atom Reactions in Complexes
2:30 - 2:50	William Breckenridge (Utah)	Half-Collision Dynamics: Exclusive Production of $Cd(5s5p^3P_2)$ from the Predissociation of $Cd(5s5p^1P_1)$·Xe Electronic States
2:50 - 3:20	BREAK	
3:20 - 3:50	Mostafa El-Sayed (UCLA)	Some Studies on the Reactivity and Dynamics of Gaseous Clusters
3:50 - 4:10	Roger Miller (North Carolina)	Photofragment Angular Distributions for $(HF)_2$: Scalar J-J Correlations in State-to-State Photodissociation
4:10 - 4:30	Michael Heaven (Emory)	Open-Shell van der Waals Complexes

January 10 (Tuesday)

Session Chair:	Rick Heidner	
8:30 - 9:00	Paul Houston (Cornell)	Fragment Vector Correlations in Photodissociation
9:00 - 9:30	Richard Zare (Stanford)	ICN Photodissociation Dynamics
9:30 - 9:50	Karl Gericke (Frankfurt)	Vector and Product Partner Correlations in Photo-Induced Processes
9:50 - 10:20	BREAK	
10:20 - 10:50	Reinhard Schinke (Göttingen)	Aspects of Spectroscopy and Scattering in Photodissociation of Polyatomic Molecules
10:50 - 11:10	Hanna Reisler (USC)	State-Specific Photodissociation Dynamics of NOCl: Scalar and Vector Properties
11:10 - 11:30	Michel Mons (Saclay)	Photodissociation of NO_2: Internal Energy Distributions and Anisotropies in the Fragments
11:30 - 11:50	Friedrich Stuhl (Ruhr)	Λ-Doublet Mixing, Rotational Relaxation and Quenching, Spin Relaxation, and Electronic Lifetimes of $NH(A^3\Pi,v=0,\Omega,J)$
12:00 - 1:30	LUNCH	

Session Chair:	Andrzej Miziolek	
1:30 - 2:00	Yuan Lee (Berkeley)	Dynamics of Concerted Decomposition of Ring Compounds
2:00 - 2:30	Stephen Leone (Colorado)	Time-Resolved Fourier Transform Emission Studies of Laser Photofragmentation
2:30 - 3:00	BREAK	
3:00 - 3:30	Richard Dixon (Bristol)	Product State Distributions in the Photodissociations of HONO and NH_3
3:30 - 4:00	David King (NIST)	Dynamics of Overtone Excited HN_3
7:00 - 10:00	POSTER SESSION (Bob Beaudet, Chair)	

January 11 (Wednesday)

Session Chair:	Mario Molina	
8:30 - 9:00	Reinhard Zellner (Hanover)	Kinetics and Dynamics of Bimolecular Radical-Radical Reactions via Bound Intermediates
9:00 - 9:30	Douglas Worsnop (Aerodyne)	Mass Accommodation and Surface Chemistry of Trace Gases on Aqueous Droplets
9:30 - 9:50	Marilyn Jacox (NIST)	The Production and Spectroscopy of O_4^+ and O_4^- isolated in Solid Neon
9:50 - 10:20	BREAK	
10:20 - 10:40	Ian Smith (Birmingham)	State Distributions for Both Products of the Reaction: $H+NO_2 \rightarrow OH+NO$
10:40 - 11:00	Jay Jeffries (SRI)	Vibrational Relaxation of $OH(X^2\Pi_i, v=2,1)$
11:00 - 11:20	Tom Slanger (SRI)	$N(^2D)$ Production from 2-Photon NO Dissociation
11:20 - 11:40	Dwayne Heard (Oxford)	Time Resolved FTIR Emission Studies of Atom-Radical Reactions
12:00 - 1:30	LUNCH	
Session Chair:	Barbara Finlayson - Pitts	
1:30 - 2:00	Stanley Sander (JPL)	Kinetics and Mechanisms of Halogen Monoxide Radical Self-Reactions
2:00 - 2:20	Paul Wine (Georgia Tech)	Atmospheric Chemistry of the ClO_2 Radical

2:20 - 2:40	Timothy Wallington (Ford)	Atmospheric Chemistry of Nitrous Acid: Reaction with NO_3 Radicals, N_2O_5, and HNO_3
2:40 - 3:10	BREAK	
3:10 - 3:30	Ralph E. Weston, Jr. (Brookhaven)	Energy Partitioning in CO from the Reaction of Hot H Atoms with CO_2
3:30 - 3:50	William Marinelli (Physical Sciences)	Energy Transfer and Radiative Rates in the $N_2(a^1\Pi_g, a'^1\Sigma_u^-)$ Electronic Manifold
3:50 - 4:10	Bob Gordon (Illinois)	$O(^3P)$: Production via VUV CO_2 Photodissociation and Reactions with H_2
5:00 - 8:00	POSTER SESSION (Bob Beaudet, Chair)	

January 12 (Thursday)

Session Chair:	Sydney Leach	
8:30 - 9:00	John Simons (Nottingham)	Intramolecular Dynamics in Vibrationally and Electronically Excited H_2O_2: Doppler Resolved Problems and Unresolved Problems
9:00 - 9:30	Fleming Crim (Wisconsin)	Vibrationally Mediated Decomposition: Electronic Photodissociation of Vibrationally Excited Molecules
9:30 - 9:50	Thomas Rizzo (Rochester)	Rotational State Specific Unimolecular Dissociation Dynamics of Hydrogen Peroxide
9:50 - 10:20	BREAK	
10:20 - 10:50	James Valentini (Irvine)	Transition State Spectroscopy in the State-to-State Domain
10:50 - 11:10	Dan Imre (Washington)	Spectroscopy of Molecules in the Process of Falling Apart: From CW to Femtoseconds
11:10 - 11:40	Eric Heller (Washington)	Raman Scattering as a Probe of Electronic Nonadiabatic Coupling
12:00 - 1:30	LUNCH	
Session Chair:	Kevin Lehmann	
1:30 - 2:00	Bradley Moore (Berkeley)	State-to-State Studies of Unimolecular Reaction Dynamics
2:00 - 2:30	Rudy Marcus (CalTech)	Unimolecular Reactions and Intramolecular Dynamics

2:30 - 2:50	Daniel Neumark (Berkeley)	Probing the Transition State Region with Negative Ion Photodetachment
2:50 - 3:20	BREAK	
3:20 - 3:50	Robert Field (MIT)	Statistical Spectroscopy: Information from Intrinsically Unassignable, Pure Sequence, Vibrational Spectra
3:50 - 4:20	Howard Taylor (USC)	The Extraction of Molecular Motions from Chaotic Spectra: The Sodium Trimer
4:20 - 4:40	Simon Bauer (Cornell)	IVR Rates from Bulb Experiments: Ensemble Averaged V-V Coupling Parameters
7:00	BANQUET	

January 13 (Friday)

Session Chair: Hanna Reisler

8:30 - 9:00	John Polanyi (Toronto)	Photodissociation and Photoreaction in the Adsorbed State
9:00 - 9:30	Ed Schlag (Munich)	Experimental Determination of Mechanisms Leading to IVR in S_1 Benzene
9:30 - 9:50	Charles Wight (Utah)	Photo-Acids: Solid State Chain Reactions
9:50 - 10:20	BREAK	
10:20 - 10:50	David Pratt (Pittsburgh)	High-Resolution Studies of Intramolecular Dynamics
10:50 - 11:20	Jan Kommandeur (Gröningen)	Questions Remaining of the Radiationless Decay of Pyrazine

XVIIIth INFORMAL CONFERENCE ON PHOTOCHEMISTRY

BayView Plaza/Holiday Inn, 530 Pico Blvd., Santa Monica, CA 90405

POSTER SESSIONS - January 10 and 11, 1989

January 10 (Tuesday)

1. IR-Emission Studies of Vibrationally Excited Radicals
   Mansour Zahedi, Fida Mohammad, and William Jackson (UC-Davis)

2. Dissociation Dynamic of CS_2 at 206 nm Using Polarized Light
   D. Winkoun and W.M. Jackson (UC-Davis)

3. The Multiphoton Dissociation of C_2H_2 and CF_3C_2H at 193 nm: Modelling of $C_2(A^1\Pi_u)$ Fragment Rotational Populations
   R.S. Urdahl, Y. Bao, and W.M. Jackson (UC-Davis)

4. Decay Kinetics of T_1 Pyrazine
   Thomas J. Bevilacqua, Joe E. Stout, and R. Bruce Weisman (Rice)

5. Electronic Excitation Transfer in a Mixed Dimer of p-xylene and p-difluorobenzene
   F. Lahmani, C. Lardeux-Dedonder and A. Zehnacker-Rentein (Paris)

6. High Energy Photophysics and Photochemistry: Single and Double Photoionization Processes in Naphthalene Between 8 and 35 eV
   Eckart Rühl, Stephen D. Price, and Sydney Leach (Paris)

7. Photochemistry Inside an Accelerator for Probing Structure
   Ron Naaman (Weizmann)

8. Photodissociation Dynamics Study of 1,4-Cyclohexadiene using Transform-Limited VUV-XUV Laser System
   E.F. Cromwell, D.-J. Liu, M.J.J. Vrakking, A.H. Kung, and Y.T. Lee (UC-Berkeley)

9. Ultra-High Resolution Photoionization Spectroscopy of Water Molecules in a Supersonic Molecular Beam
   Marcus J.J. Vrakking, Evan F. Cromwell, Di-Jia Liu, Andrew H. Kung, and Yuan T. Lee (UC-Berkeley)

10. Reactivity of Aniline Cation to Stepwise Solvation
    Jack A. Syage (Aerospace)

11. On the Direct Vibrational Spectroscopy of Transition States
    Jack A. Syage (Aerospace)

12. Photolysis of Simple Nitroalkanes
    Charles E. Miller, W.N. Sisk, and H.S. Johnston (UC-Berkeley)

13. Fragmentation Dynamics of HONO's B State
S.J. Wategaonkar, J.H. Shan, and R. Vasudev (Rutgers)

14. Photofragment Spectroscopy of Cobalt Tricarbonylnitrosyl and its Trialkylphosphine Derivatives
Charles A. Wight (Utah)

15. The UV Spectroscopy of C_2N_2
Joshua B. Halpern (Howard)

16. The Photodissociation of ClCN Between 191 and 220 nm
Samuel A. Barts and Joshua B. Halpern (Howard)

17. Photofragmentation Study of Triplet Ketene: Product State Distributions and Dissociation Rate of Ketene
I-Chia Chen and C. Bradley Moore (UC-Berkeley)

18. The 157-nm Photodissociation of OCS
Charles E. Strauss, P.L. Houston, I. Burak, and J.W. Hepburn (Cornell)

19. Molecular Beam Studies of CH_3I Dissociation Dynamics
Robert E. Continetti, B.A. Balko, and Y.T. Lee (UC-Berkeley)

20. Photodissociation Dynamics and Bond Breaking Selectivity of HOD
Jinzhong Zhang and Dan G. Imre (Washington)

21. Photodissociation of Mass-Selected Solvated Metal Cations:
Meihua Shen and James M. Farrar (Rochester)

22. Photochemistry of NF_2 in the 260 nm Band
H. Helvajian, R.F. Heidner III, J.S. Holloway and J.B. Koffend (Aerospace)

23. Production and Photodissociation of CCl_3 Radicals in a Molecular Beam
Eric J. Hintsa, Xinshen Zhao, William J. Jackson, Walter B. Miller, Alec M. Wodtke, and Y.T. Lee (UC-Berkeley)

24. Time Resolved Emission Spectroscopy in Laser Produced Plasmas
R. Alam, Lutz Hüwel, and K. Wasserman (Wesleyan)

25. Single and Two-photon Laser Induced Fluorescence Studies of Carbon Monosulfide
A.J. Hynes (GTRI)

26. Impulsive Model Calculations, Doppler Profile Studies and Alignment Measurements in the Photodissociation of BrCN as a Function of Photolysis Wavelength
Hua Lin, Elizabeth Johnston, Albert Paul, and William Jackson (UC-Davis)

27. Rotationally Resolved Photodissociation Rates for NH_3, NH_2D and ND_2H in the A State
Steven Henck, Wen-Bin Yen and Kevin K. Lehmann (Princeton)

28. Excimer Laser Photochemistry of Simple Oximes and Azines: Search for the LIF Spectrum of the H_2CN Radical
P.J. Dagdigian, R.C. Sausa, W.R. Anderson, and A.W. Miziolek (BRL)

29. Photodissociation Processes in BH_3CO
Louise Pasternack, B.R. Weiner, and H.H. Nelson (NRL)

30. Fragmentation Dynamics of H_2S at 193 nm: Local Modes and Bending Vibrations in the Emission Spectroscopy of Dissociating Molecules
Maria Person and Lori Butler (Chicago)

31. High Sensitivity, Transient Spectroscopy Using Tunable Diode Lasers
John Reid (Lumonics)

32. A Potential Energy Surface for the Reaction Br+HBr → BrH+Br via Photoelectron Spectroscopy of $BrHBr^-$
Ricardo B. Metz, A. Weaver, S.E. Bradforth, T. Kitsopoulos, and D.M. Neumark (UC-Berkeley)

33. Probing the Electronic States of NO_2 with Negative Ion Photoelectron Spectroscopy
Alex Weaver, R.B. Metz, S.E. Bradforth, and D.M. Neumark (UC-Berkeley)

34. Predissociation of O_2 in the B-State
A.M. Wodtke, L. Hüwel, H. Schluter, H. Voges, G. Meijer, and P. Andresen (UC-Santa Barbara)

35. Laser Induced Predissociation Fluorescence (LIPF) Spectroscopy in a Flame Using Tunable Excimer Lasers
A.M. Wodtke, L. Hüwel, H. Schluter, H. Voges, G. Meijer, and P. Andresen (UC-Santa Barbara)

36. Quasi-Chemical Bonds in Mercury-Molecule van der Waals Complexes
Marie-Christine Duval, B. Soep, W.H. Breckenridge, T.S. Zwier, R.D. van Zee, and W.B. Bosma (Paris)

37. Photochemistry of Xenon-Halogen van der Waals Complexes Intermediate State in the Reaction $(Xe\text{-}X_2)^* \rightarrow Xe\ X+X$
M. Boivineau and Christophe Jouvet (Paris)

38. Resonance Frequencies of Metal Cluster Photofragmentation
Vitaly Kresin (UC-Berkeley)

39. Method of Nonadiabatic Hamiltonian and the Theory of Electronic-Vibrational Coupling: Application to Raman Scattering and Phosphorescence
Vladimir Z. Kresin and William A. Lester, Jr. (UC-Berkeley)

40. Photodissociation and Kinetic Energy Release of Transition Metal Cluster Ions
Peter P. Radi, M. Rincon, M.T. Hsu, and M.T. Bowers (UC-Santa Barbara)

41. Photodissociation Dynamics of Ions and Ionic Clusters
Joseph T. Snodgrass, Coleen Roehl, and Michael T. Bowers (UC-Santa Barbara)

42. Proton Transfer in Small Clusters of Phenol with NH_3 Produced in a Supersonic Expansion
C. Jouvet, D. Solgadi, A. Tramer (Paris)

43. Spectroscopy of Jet Cooled Reactive Molecules
C. Tom Wickham-Jones, Erik C. Richard, and Veronica Vaida (Colorado)

44. Photodissociation Dynamics of Isolated and Clustered Molecules
C. Tom Wickham-Jones, D.J. Donaldson, and V. Vaida (Colorado)

44A. Theoretical Calculation of CH Overtones of Benzene (v = 1 and 3) Using Artificial Intelligence Searching Techniques
Y.-F. Zhang, S.J. Klippenstein and R.A. Marcus (CalTech).

January 11 (Wednesday)

45. Laser Probing of Velocity Changing Collisions of Heavy Atomic Photofragments
Joseph I. Cline, Craig A. Taatjes, and Stephen R. Leone (JILA)

46. The Methyl Rotor as a Probe of Electron Densities
Wayne B. Bosma, Roger N. van Zee, Timothy S. Zwier and Lee H. Spangler (Montana)

47. Accurate Quantum Mechanical Reaction Dynamics
Meishan Zhao, Philipe Halvick, David Chatfield, Mirjana Mladenovic, and Donald G. Truhlar, David W. Schwenke, Yan Sun, Chin-hui Yu, Omar Sharafeddin, and Donald J. Kouri (Minnesota)

48. Vibrationally Activated Barrier Crossing in Aromatic van der Waals Complexes
Andrea L. Motyka, Stacey A. Wittmeyer, Andrew J. Kaziska, Maria I. Shchuka, and Michael R. Topp (Pennsylvania)

49. Dynamics of Rovibrational Excitation from Energy Transfer and Reactive Interactions
M.E. Fraser, W.T. Rawlins and S.M. Miller (Physical Sciences)

50. Two-Colour $^{13}CO_2$ MPA of $CDCl_3$
Glenn McRae (Chalk River)

51. Quantum Study of the Scattering of $H_2(B,v,j)$ by He
P. Pernot, R.M. Grimes, and W.A. Lester, Jr. (UC-Berkeley)

52. Fluorescence Quenching of Electronically Excited Hydrogen
Charles D. Pibel, Karen Carleton, and C. Bradley Moore (UC-Berkeley)

53. Laser Flash Photolysis of FSO_2OF; Temperature and Pressure Dependence of the Reaction $F+FSO_3+M \rightarrow FSO_2OF+M$
A.C. Croce, C.J. Cobos, and E. Castellano (INIFTA)

54. Laser Measurements of the Arrhenius Parameters for the Reaction of CN Radicals with Various Saturated Hydrocarbons
Leon R. Copeland and W.M. Jackson (UC-Davis)

55. Absolute Rate Constants for Triplet Methylene Removal
David C. Darwin and C. Bradley Moore (UC-Berkeley)

56. Spectroscopic and Kinetics Studies of the ClO Dimer
Randall R. Friedl, Manfred Birk, and Stanley P. Sander (CalTech)

57. Laboratory Studies of Heterogeneous Reactions and Thermodynamic Properties of Acid-Ice Surfaces Important in the Polar Stratosphere
Leon F. Keyser, Steven B. Moore, and Ming-Taun Leu (JPL)

58. The Relative Rates of Formation of Nitrosyl Bromide and Nitrosyl Chloride from the Reaction $2NO_2(g) + NaX(s) \rightarrow XNO(g) + NaNO_3(s)$ (X = Br, Cl) and the Implications for the Tropospheric Chemistry of Polluted Marine Areas
B.J. Finlayson-Pitts and F.E. Livingston (CSU-Fullerton)

59. UV-Absorption Spectra and Kinetics of the Methylperoxy and Acetylperoxy Radicals
Geert K. Moortgat, Franz Simon, Wolfgang Schneider, Bernard Veyret and Rober Lesclaux (MPI-Mainz)

60. Temperature Study of Bromine Atom Reaction Rate with Ethylene: Implication for Modeling Atmospheric Bromine Chemistry
David F. Nava and Walter A. Payne (NASA/GSFC)

61. Flourescence of ClO Radical from Photodissociation of Cl_2O in the Vacuum UV
J.B. Nee and K.J. Hsu (Taiwan)

62. Product Formation and Rate Constants for the Reaction of N Atoms with Methyl Radicals from 200 to 423 K
F.L. Nesbitt, G. Marston, D.F. Nava, W.A. Payne, and L.J. Stief (NASA/GSFC)

63. Kinetics of the Reaction of N Atoms with the Methylene Amidogen (CH_2N) Radical
G. Marston, F.L. Nesbitt, and L.J. Stief (NASA/GSFC)

64. Kinetics of the Reactions of $O(^3P)$ and $Cl(^2P)$ with HBr and Br_2
J.M. Nicovich and Paul H. Wine (GTRI)

65. Reaction Rate of CN Radicals with Cyanoacetylene
J.B. Halpern, George E. Miller, and Hideo Okabe (Howard)

66. Collision-Induced Electronic Quenching of $BH(A^1\Pi)$
C.H. Douglass and Jane K. Rice (NRL)

67. Fourier Transform Ultraviolet Absorption Spectroscopy of the $\tilde{A}^2A_2 \leftarrow X^2B_1$ Transition of Supersonically Jet-Cooled OClO
Erik C. Richard, C. Tom Wickham-Jones, and Veronica Vaida (Colorado)

68. A Critical Evaluation of the Kinetic Behavior of Electronically Excited States of Various Species
Keith Schofield (UC-Santa Barbara)

69. CARS Observation of Inverted Fine Structure Populations in ^3P Sulfur Atoms Formed through Collisional Quenching
Joe E. Stout, B.K. Andrews, T.J. Bevilacqua, and R.B. Weisman (Rice)

70. Two-Photon Photodissociation of Liquid Water at 248 nm
R.P. Thorn and Paul H. Wine (GTRI)

71. Kinetics and Reaction Pathways for the Self-Reaction of ClO
R.L. Mauldin III, Michael Trolier, and A.R. Ravishankara (NOAA/CIRES)

72. Atmospheric Photochemistry of CH_3OOH and H_2O_2: UV Absorption Cross Sections and Quantum Yields of OH Production
Ghanshyam L. Vaghjiani (NOAA/CIRES)

73. Infrared Fluorescence from NO_2 Excited at 400-500 nm
James J.F. McAndrew, Jack M. Preses, Ralph E. Weston, Jr., and George W. Flynn (Brookhaven)

74. Adduct Formation of OH with Toluene and Unimolecular Decay and Reaction of the Adduct Toluene-OH with NO
Franz Witte, Cornelius Zetzsch, and Pascal Devolder (Fraunhofer)

75. Determination of the Rate Constants for Radical-Radical Cross Reactions
Leslie J. Garland and Kyle D. Bayes (UCLA)

76. ArF Laser Perturbation of Low Pressure $CH_4/O_2/N_2$ Flames
Nancy L. Garland, James W. Fleming, and H. Douglas Ladouceur (NRL)

77. Kinetic and Mechanistic Studies of the Reactions of OH with Aliphatic Alcohols
Wayne P. Hess and Frank P. Tully (Sandia)

78. The Investigation of a Low Pressure Methane/Nitrous Oxide Flame Using Fourier Transform Infrared Spectroscopy
K.L. McNesby and R.A. Fifer (BRL)

79. Quenching Studies of Electronically-Excited $NO_2(^2B_2)$ in KrF Laser Photodissociation of Tetranitromethane
P. Papagiannakopoulos and C. Capellos (Geo-Centers)

80. Thermal and State-to-State Studies of Reactions of the CN Radical
I.R. Sims, R. Spencer-Smith, Ian W.M. Smith and G.A. Segal (Birmingham)

81. Measurements of Vibrational Relaxation in HCN and DCN
Ian W.M. Smith and J.F. Warr (Birmingham)

82. Rate Constants for Reaction and Relaxation of OH(v=0) and OH(v=1) with CH_4, C_2H_4 and C_2H_2 over the Temperature Range: 295-570 K
M.J. Frost, and Ian W.M. Smith (Birmingham)

83. Time-Resolved IR Spectroscopy in Cryogenic Rare Gas Solutions: Direct Rate Measurements of Organometallic C-H Bond Insertion Reactions
B.H. Weiller, E.P. Wasserman, R.G. Bergman, C.B. Moore, and G.C. Pimentel (UC-Berkeley)

84. Theoretical Studies of H + HX at High Collision Energy
Pamela M. Aker and J.J. Valentini (UC-Irvine)

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XIIIth INFORMAL CONFERENCE ON PHOTOCHEMISTRY

(Invited Speakers)

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Dr. Reinhard Zellner
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XVIIITH INFORMAL CONFERENCE ON PHOTOCHEMISTRY
JANUARY 9-13, 1989*
SANTA MONICA, CA

SECOND CIRCULAR

ORGANIZING COMMITTEE:

C. Wittig, H. Reisler, and R. A. Beaudet, University of Southern California.

SCIENTIFIC PROGRAM:

The meeting emphasizes gas phase processes of small molecules. In addition to the invited lectures, there will be oral presentations relating to the main topics of the conference, as well as poster sessions. As we would like to encourage comments and the presentation of new results, ample time will be given for discussion following each oral presentation, and participants can present a single overhead to illustrate a point.

The topics to be emphasized at this meeting are:

1. Spectroscopy, radiationless transitions and photophysics
2. State-specific photodissociation dynamics
3. Photochemical probing of the transition state
4. Stereochemical dynamics via product alignment and polarization
5. Reaction dynamics in the bulk and in complexed species
6. Photochemical processes at interfaces
7. Photodissociation of clusters
8. Photochemical processes in the atmosphere
9. Environmental photochemistry

The following scientists have consented to present invited talks: Fleming Crim (Wisconsin), Richard Dixon (Bristol), Mostafa El-Sayed (UCLA), Robert Field (MIT), Eric Heller (Washington), J. Robert Huber (Zürich), Paul Houston (Cornell), David King (NBS), Jan Kommandeur (Gröningen), Yuan Lee (UC-Berkeley), Stephen Leone (Colorado), Rudy Marcus (CalTech), C. Bradley Moore (UC-Berkeley), John Polanyi (Toronto), David Pratt (Pittsburgh), Stanley Sander (JPL), Reinhard Schinke (Göttingen), Ed Schlag (München), Giacinto Scoles (Princeton), John Simons (Nottingham), Richard Smalley (Rice), Benoit Soep (Paris-Sud), Howard Taylor (USC), Jim Valentini (UC-Irvine), Robert Whetten (UCLA), Curt Wittig (USC), Douglas Worsnop (Aerodyne), Richard Zare (Stanford), Reinhard Zellner (Göttingen).

CONTRIBUTED PAPERS:

The deadline for all contributed papers is October 31, 1988. Abstracts of up to 200 words should be submitted in a form that is suitable for duplication. Abstracts can also be mailed via Bitnet to REISLER@RAMOTH. Oral presentations of 20 min. + 5 min. discussions will follow the invited talks in each of the main topics listed above. In addition, poster sessions will be held. It might be possible to include a few post-deadline papers in the poster presentations, but people are strongly urged to keep the Oct. 31st deadline for those as well.

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* the conference duration has been extended to Friday, January 13, 1989.

REGISTRATION:

The conference fee is $150, and includes lunches and the banquet; registration forms are enclosed. Please, send the registration forms to: **Ms. Sarah Novak, Department of Chemistry, University of Southern California, Los Angeles, CA 90089-0482.** Make checks payable to: Department of Chemistry.

ACCOMMODATIONS:

A block of rooms has been reserved at the Holiday Inn - BayView Plaza Hotel, 530 Pico Boulevard, Santa Monica, CA 90405 and a special group rate has been arranged as follows:

Single: $65 Double: $65
Triple: $75 Quad: $85

plus 10% sales tax. Rollaway charge is $10 per day and there is no charge for children 18 and under. Rooms will be ready for occupancy at 4:00 p.m. of Jan. 8, 1989. To guarantee a reservation for arrival later than 6:00 p.m., a credit card number needs to be given. Call (213) 399-9344 and ask for Reservation Department. (Please make note that the BayView Plaza has a 48-hour cancellation policy). When making a booking, please make sure you identify yourself as being part of the U S C Photochemistry Conference. The hotel registration form is enclosed, and it must be returned directly to the hotel by November 24, 1988, to guarantee a room and the special rate.

CONFERENCE BANQUET:

Will be held at the Holidy Inn - BayView Plaza Hotel on Thursday, Jan 12, 1989.

TRAVEL SUPPORT FOR GRADUATE STUDENTS AND POSTDOCS:

At this meeting, we wish to encourage the participation of graduate students and postdocs as much as possible, and NSF and NASA have agreed to make funds availabe for travel assistance for U.S. students/postdocs who are going to present their work. Requests for support should be submitted before Oct. 10, 1988, and should be accompanied by an abstract of the work to be presented. The amount of travel support is limited, and people are urged to apply early. **Please send applications to the same address as the registration.**

XVIIITH INFORMAL CONFERENCE ON PHOTOCHEMISTRY
JANUARY 9 - 13, 1989
HOLIDAY INN-BAYVIEW PLAZA HOTEL
530 PICO BOULEVARD, SANTA MONICA, CA 90405

REGISTRATION FORM

LAST NAME _____ FIRST NAME _____

ORGANIZATION _____
(TO BE TYPED ON BADGE)

ADDRESS:

_____

_____

CITY _____ STATE _____ ZIP _____

TELEPHONE : _____

WILL YOU BE PRESENTING A PAPER? ☐ YES ☐ NO

IF YES, WHAT IS THE MOST LIKELY TOPIC TO WHICH IT BELONGS (SEE LIST IN 2ND CIRCULAR)?_____

THE REGISTRATION FEE IS $150 AND INCLUDES LUNCHES AND THE BANQUET.

PLEASE, MAIL TO:

MS. SARAH NOVAK
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF SOUTHERN CALIFORNIA
LOS ANGELES, CA 90089-0482

MAKE CHECKS PAYABLE TO: DEPARTMENT OF CHEMISTRY

PLEASE SEND THIS FORM WITH PAYMENT (U.S. CURRENCY) BEFORE OCTOBER 31ST IF POSSIBLE. A RECEIPT WILL BE MAILED FOR FORMS RECEIVED BEFORE THIS DATE.